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## EXTENSION

OF

## THE GOODYEAR PATENT.

DECISION OF THE COMMISSIONER.

Ineph Hollo.

United States Patent Office,

June 14, 1858.

In the matter of the application of Charles Goodyear, for the extension of a patent granted to him for "improvement in India rubber fabrics," on the 15th day of June, 1844, and which was reissued in two separate patents on the 25th day of December, 1849, under the designations of "improvement in processes for the manufacture of India rubber" and "improvement in felting India rubber with cotton fibre."

It appears that on the 30th January, 1844, the applicant, through his agent, (Newton,) obtained from the English government a patent for this invention or discovery, known in popular parlance as a "process for vulcanizing India rubber," and, on the 15th of June thereafter, the patent now sought to be extended was issued from this office. It is assumed and insisted by the contestants that the American patent should have borne even date with the English, and that, in law, it expired with it on the 30th January last; and, in consequence, it is denied that the Commissioner has any authority to entertain a petition for its renewal. What shall be the date and duration of a patent, is a question which must be decided by this office on each original application; and in the case under consideration it was determined that it should bear date the 15th June, 1844, and should secure a monopoly of the invention for fourteen years thereafter. If this was irregular, in view of the English patent, it did not render that issued by this office void, as was held by the Supreme Court in 15 Howard, 112, O'Reilly et al. vs. Morse et al. Being at most voidable, it would seem that it should be treated as valid until vacated by the judgment of some judicial tribunal. At all events, whatever may be the power of the courts over the instrument, it is not believed to be competent for the Commissioner in a summary, and in some respects a collateral proceeding like this, to revise and reverse a former decision of this office, under which so many rights have been vested. Were his power, however, plenary in the matter, I should not hesitate to hold that the provisions of law cited do not sustain this objection, which has been taken in the nature of a plea to the jurisdiction. The 8th section of the act of 1836, and the 6th section of that of 1839, being in pari materia, must be construed together; and as the latter is not, in its terms, a repeal of the former, it can, according to a well-settled principle of construction, be allowed to have that effect only so far as the provisions of the two are clearly incompati-The statute of 1836 declares that ble. nothing therein contained "shall be construed to deprive an original and true inventor of the right to a patent for his invention by reason of his having previously taken out letters patent therefor in a foreign country, and the same having been published, at any time within six months next preceding the filing of his specification and drawings. And, whenever the applicant shall request it, the patent shall take date from the filing of the specification and drawings; not, however, exceeding six months prior to the actual issuing of the patent." It is sufficiently clear that this clause applies only to those cases in which the foreign patent has been issued before, but within six months of the filing of the specification and drawings. A reference to the record, however, shows that the spe-cification and drawings in this case were filed on the 15th of January, 1844, so that the foreign patent, instead of having been taken

out before, as contemplated by the act, was in fact taken out fifteen days after the filing of the specification and drawings in this office. This would seem to relieve the case entirely from the operation of the provision. But should it be treated as subject to it, as the American patent was issued four and a half months after the publication of the English, the most that could be claimed would be, that the applicant might, "on request," have had his patent ante-dated, so as to have reached back to the filing of his specification and drawings, but he was not bound to do so. It is manifestly a privilege bestowed, and not a duty imposed upon him. He did not choose to avail himself of that privilege; and hence the patent went out, properly bearing its actual date. The act of 1839 asserts that "no person shall be debarred from receiving a patent for any invention or discovery, as provided in the act approved on the 4th of July, 1836, to which this is additional, by reason of the same having been patented in a foreign country more than six months prior to his application: Provided, That the same shall not have been introduced into public and common use in the United States prior to the application for such patent: And provided, also, That in all cases every such patent shall be limited to the term of fourteen years from the date or publication of such letters patent." It will be perceived that this provision is confined expressly to an invention or discovery for which letters patent shall have been taken out in a foreign country more than six months prior to the filing of the application here, and declares such invention or discovery patentable under limitations. The act of 1836 referred to this class of cases, and, in effect, treated them as unpatentable. To this extent it is repealed by the act of 1839, because irreconcilable with it. But the act of 1836 refers to another and very distinct class of cases, in which the foreign letters patent were not published more than six months before the date of the application here, and declares them patentable. To this latter class no allusion is made by the act of 1839; and as this act is, in this respect, in no degree inconsistent with that of 1836, and as it professes to be not abrogatory of. but "additional" to it, it must, upon the soundest principles of interpretation, be held that this feature of the act of 1836 remains in full force. The closing language of the clause quoted is not regarded as in conflict with the construction insisted on. words are, "in all cases every such patent shall be limited," &c. What is intended by "every such patent?" Undoubtedly the kind of patent spoken of in the preceding part of the section, and no other, to wit: a patent based on an invention for which letters patent had been issued in a foreign country more than six months before the filing of the application here. It may be very well supposed that Congress might consider six months as too small a fraction of time to require its introduction as a part of the lifetime of the patent, and would, therefore, leave it to be embraced or not, at the option of the applicant; while to guard against abuse, if the period were longer, the inclusion of the whole might be consistently and properly exacted.

The novelty and original patentability of this invention, as well as its great public utility, are fully established by the report of the examiner and by the depositions on file. But two leading questions, therefore, remain to be disposed of:

1st. Has the applicant used due diligence in developing his invention and in introducing it into public use?

2d. Has he, from the use and sale of the invention, received a reasonable remuneration for the time, ingenuity, and expense bestowed upon the same, and the introduction thereof into use?

Upon the first point, the testimony alike of the applicant and of the contestants is concurrent and conclusive. From the first moment that the conception entered his mind until his complete success-embracing a period of from sixteen to eighteen years—he applied himself unceasingly and enthusiastically to its perfection and to its introduction into use, in every form that his fruitful genius could devise. So intensely were his faculties concentrated upon it, that he seems to have been incapable of thought or of action upon any other subject. He had no other occupation, was inspired by no other hope, cherished no other ambition. He carried continually about his person a piece of India rubber, and into the ears of all who would listen he poured incessantly the story of his experiments and the glowing language of his prophecies. He was, according to the witnesses, completely absorbed by it, both by day and night, pursuing it with untiring energy and with almost superhuman perseverance. Not only were the powers of his mind and body thus ardently devoted to the invention and its introduction into use, but every dollar he possessed or could command through the resources of his credit, or the influences of friendship, was uncalculatingly cast into that seething caldron of experiment which was allowed to know no repose. The very bed on which his wife slept, and the linen that covered his table, were seized and sold to pay his board; and we see him with his stricken household following in the funeral of his child on foot, because he had no means with which to hire a carriage. His family had to endure privations almost surpassing belief, being frequently without an article of food in their house, or fuel in the coldest weather; and izdeed it is said that they could not have

lived through the winter of 1839 but for the kind offices of a few charitable friends. They are represented as gathering sticks in the woods and on the edges of the highways, with which to cook their meals, and digging the potatoes of their little garden before they were half grown, while one of his hungry children, in a spirit worthy of his father, is heard expressing his thanks that this much had been spared to them. We often find him arrested and incarcerated in the debtor's prison; but even amid its gloom his vision of the future never grew dim, his faith in his ultimate triumph never faltered. mayed by discomfitures and sorrows which might well have broken the stoutest spirit, his language everywhere, and under all circumstances, was that of encouragement and of a profound conviction of final success. Not only in the United States did he thus exert himself to establish and apply to every possible use his invention, but in England, France, and other countries of Europe, he zealously pursued the same career. In 1855 he appeared at the World's Fair in Paris, and the golden medal and the Grand Cross of the Legion of Honor were awarded to him as the representative of his country's inventive genius. Fortune, however, while thus caressing him with one hand, was at the same moment smiting him with the other; for we learn from the testimony that these brilliant memorials passed from the Emperor and reached their honored recipient, then the occupant of a debtor's prison among strangers and in a foreign land-thus adding yet another to that long sad catalogue of public benefactors who have stood neglected and impoverished in the midst of the waving harvest of blessings they had bestowed upon their race. Throughout all these scenes of trial, so vividly depicted by the evidence, he derived no support from the sympathies of the public. While the community at large seem to have looked on him as one chasing a phantom, there were times when even his best friends turned away from him as an idle visionary; and he was fated to encounter on every side sneers and ridicule, to which each baffled experiment and the pecuniary loss it inflicted, added a yet keener edge. The mercenary naturally enough pronounced his expenditures, so freely made, culpably wasteful; the selfish and the narrow-minded greeted the expression of his enlarged and far-reaching views as the ravings of an enthusiast; while it is fair to infer from the depositions that not a few of the timid and plodding, who cling, tremblingly apprehensive of change, to the beaten paths of human thought and action, regarded him as wandering on the very brink of insanity, if not already pursuing its wild and flickering lights. Such in all times has been the fate of the greatest spirits that have appeared on the arena of human discovery, and such will probably continue to be the doom of all whose stalwart strides carry them in advance of the race to which they belong With such a record of toil, of privation, of courage, and of perseverance in the midst of discouragements the most depressing, it is safe to affirm that not only has the applicant used that due diligence enjoined by law, but that his diligence has been, in degree and in merit, perhaps without a parallel in the annals of invention.

Before entering upon an examination of the second leading question, several preliminary issues raised by the contestants must

be met and decided.

The account of expenditures and receipts originally presented, it is admitted, was too general in its terms to be accepted as a compliance with the requirements of the statute. Hence subsequently in April an additional or amended account was offered, which, in consequence of the absence of the applicant in England, was not sworn to by him until the 23d of that month, and was not filed in this office, as thus verified, until the 8th May. This amended statement was intended, not as a substitute for the original, but as a correction of certain inaccuracies which had crept into it, and as furnishing the details which law and usage demand. It is objected that it should not be considered, because, when first lodged here, it was without the oath of the applicant, and because, when that oath was appended on the 8th May, it was too late for the contestants to take their rebutting testimony. It will be observed that there is nothing in the circumstances attending this delay calculated to excite a suspicion of a desire on the part of the applicant to suppress the truth by stifling inquiry; and it must be also borne in mind, that, although there is a rule of this office on the subject, the statute is silent as to the time when the account shall be filed. It is true that it must be "under oath," and the oath of the patentee was no doubt contemplated by the framers of the law, but it is also true that cases have arisen in which that oath was necessarily and properly dispensed with, as when the patentee had died or become insane. Other cases may well be imagined in which the oath of parties entirely disinterested and having a thorough knowledge of the subject-matter would be more satisfactory to the judicial mind than that of the patentee. The amended account was, as early as the 8th of April, verified by the oaths of a number of disinterested witnesses professing an acquaintance with the transactions to which it relates; and this is claimed to be a substantial compliance with the statute. Assuming that the contestants were not bound to take rebutting testimony until after the account had been sworn to by the applicant, yet they had notice of the ex-

istence and character of that account, through a copy served on them as early as the 20th April, and this was sufficient to put them upon inquiry. Being thus distinctly apprised of what it was proposed to prove, they could have occupied themselves in discovering such evidence as might exist in their favor, and in taking at least the preliminary steps to the examination of the witnesses. The time for taking the proof having been extended, there was at least sixteen days, between the 8th and 24th of May, allowed for assailing the account by counteracting testimony; and we are warranted from the record in presuming that this time was, with the greatest zeal and activity, devoted to the taking of depositions, and that all the witnesses who could be found, having knowledge of facts deemed important for the contestants, and who were willing to depose, were examined. It is true that Mr. Cozzens, in his deposition, expresses the opinion "that there had not been anything like enough time since the filing of the applicant's petition and statement to properly prepare an opposition there-to." Waiving the obvious criticism upon this language, it is a complete answer to say, that the name of no witness is given whom the contestants were prevented from examining for want of time, nor is any fact material to them alleged to exist and to be susceptible of proof, but which they were denied an opportunity of establishing. In the absence of any such specific averment, it is impossible to decide, in the language of a rule of this office, that "a substantial injury has been wrought to the party raising the objection;" and hence, according to that rule, such objection cannot prevail on the final hearing. When a party frankly avows that he has committed an error in a judicial oath, and asks the privilege of correcting it under the same sanctions, a tribunal whose mission is the ascertainment of truth should rather encourage him to make such correction than rebuke him for an offer to do

Another question to be answered before proceeding to the main inquiry is, whether, in determining the adequacy of the remuneration received by the applicant, the receipts of his assignees and licensees-admitted to amount to many millions—should be charged to the patent. The first impression of my mind was favorable to the position taken by the contestants; but a more critical examination of the statute has led me to an opposite conclusion. At the time of the passage of the act of 1836, it was the universal custom of inventors to sell and assign the rights secured to them by their patents; and this course on their part has been constantly contemplated and sanctioned by law. Hence the statute declares that if the "patentee" shall fail, from "the use and sale of his in-

vention," to realize a reasonable remuneration, he shall be entitled to an extension. The law, in its enactments, is generally found to be a faithful reflection of the actual life of the world. It was well known that inventors, as a class, were particularly liable to be overreached in their contracts, and to be driven to dispose of their inventions at ruinous rates, under the pressure of poverty, and often before their utility had been fully demonstrated. Hence the generous guarantee was given them that if from such "sales," no matter how made, and from such "use" as they might choose to make of their inventions, they were unable to secure a reasonable compensation, their monopoly should be further There is not the remotest allusion extended. to their assignees and licensees; and, as the reason of the enactment does not reach them, it would be an unsound principle of construction which should embrace them by implication. A further reason why they should not be thus embraced is found in the fact that a very large part of the profits of these assignees, who are generally manufacturers, is the product of their own capital and enterprise in association with the invention, and could not therefore be properly charged to its account in this proceeding. Assignees and licensees constitute a very numerous class, scattered throughout the length and breadth of the land, and their profits from inventions must be regarded as the profits of that great public of which they are so important a part. The very large sums which they are alleged, by all the witnesses who have spoken on the subject, to have made from this invention, is but another of the ever-multiplying proofs of its extraordinary value to the world; for it is safe to conclude that the consumers of the fabrics have been equally benefited with the manufacturers who produced them. If, on an application for an extension, the patentee were chargeable with the receipts of his assignees and licensees, it would then follow that he would be bound to exhibit them in his accountsa manifest impossibility, it is scarcely necessary to say, in the great majority of cases.

The first step in determining the sufficiency of the remuneration is, to ascertain, as far as practicable, the amount of the applicant's receipts and expenditures in connexion with the invention. The apparently discrepant and informal character of the accounts filed has provoked much severity of criticism and some denunciation on the part of counsel. It is admitted that they have not the precision and symmetry which belong to the products of the counting-room, and which might have been imparted to them by the applicant, had he been a merchant's clerk, instead of the brilliant and impulsive genius that he is. In explanation of the generality and uncertainty by which

it is insisted they are marked, it is in proof that the applicant never kept any books or memoranda from which more reliable statements could be prepared. In this respect his course of life has been in entire harmony with that of the class to which he belongs. Inventors and other men of high creative genius have ever been distinguished for a total want of what is called "business habits." Completely engrossed by some favorite theory, and living in the dazzling dreams of their own imagination, they scorn the counsels and restraints of worldly thrift, and fling from them the petty cares of the mere man of commerce as the lion shakes a stinging insect from his mane. The law, in its wisdom, takes cognizance of human character, and deals with men and with classes of men as it finds them. It seems, in this instance, to have assumed, and justly, that, if we would have the magnificent creations of genius, we must take them with all those infirmities which seem as inseparable from them as spots are from the sun. Hence the statute does not require that the accounts of inventors shall have that formality and that severe exactitude which might well have been claimed of a merchant, with his ledger open before him. All that is insisted on is that the statement furnished shall be "sufficiently in detail to exhibit a true and faithful account of loss and profit in any manner accruing to him from and by reason of said invention." It is manifest that it is to the results-which indicate "loss and profit"rather than the minute elements of the transactions which form the subject of the account, that the law looks. The applicant's statement, as amended, appears to have been compiled with the most laborious care, and from every source of information accessible to him or his attorneys. It is regarded as fully conforming to the letter and spirit of the statute. The principal discrepancy between the original and amended statement is satisfactorily explained. The applicant held at the same moment three patents for processes connected with the manufacture of India rubber, viz: that of Chaffee, that of Hayward, and that for his own vulcanizing process. In all his contracts, he transferred these three patents together, making no designation, in the body of the assignments, of the estimate placed upon either of them separately. In his original statement, he inadvertently charges to his own patent the whole of the receipts from this source; in his amendment, he sets the Chaffee and Hayward patents down as properly chargeable with one-fourth of the proceeds of such sales, and makes, accordingly, a corresponding deduction from his exhibit of receip's. The language of his first statement, properly interpreted in the light of the assignments themselves, justified this step. Whatever

those patents may have cost him, they were his property, and it was due to truth and to the claim now under consideration that their actual value should have been ascertained. The witnesses who speak of them prove conclusively that the applicant has rather under than overrated them, which relieves him from all imputation in the matter.

What, then, has been the amount of the applicant's remuneration? His account, as amended, exhibits \$162,894 09 of receipts, and \$129,535 46 of expenditures—thus showing a profit of \$33,358 63. Numerous intelligent and unimpeached witnesses having intimate relations with the applicant, and acquainted with his business affairs, have deposed in reference to this account; and their testimony, without an exception, powerfully supports its truth. Considering the remoteness and complicated character of the transactions, the statements in this paper are illustrated and sustained with singular force. The rebutting evidence assails directly no item either of the receipts or expenditures, but consists of the opinions and conjectures of a large number of witnesses who clearly had no means of knowing either the truth or falsehood of the matters set forth in the They profess to believe that the applicant could not have expended such large sums in his experiments, because he was poor; and this is the sole basis of almost every opinion expressed on the subject. Had these witnesses known-what this record makes so apparent—the overwhelming debts which have hung over the applicant throughout his long and self-sacrificing career, and many of which still bear him down, his enormous outlays would not have been to them so impenetrable a mystery. The very elaborate report of the examiner, after a severe scrutiny of the expenditures and receipts as exhibited, restates the account, and, in doing so, increases the applicant's profits to \$114,128 09. In arriving, however, at this conclusion, he has excluded two items of expenditure which 1 am well satisfied should have been retained. The first is for \$13,310, and is not allowed because for disbursements occurring before the invention or discovery was made. The act of Congress directs an inquiry into the "loss and profit in any manner accruing to him (the inventor) from and by reason of said invention." Whether we consult the letter or reason of the law, I entertain no doubt but that expenditures made in the progress of experiments preceding the invention, but looking to it, are as clearly chargeable to the patent as those made afterwards, either in perfecting it or introducing it into use. The other item is for \$46,084 46, as set forth in exhibit No. 2, and I am at a loss to perceive any sufficient reason for its rejection. The applicant alleges expressly in his sworn statement that the whole of this sum "was ex-

pended by him in perfecting his said invention and bringing the same into use." De Forest, who advanced the money, and who holds the drafts specified in the exhibit, when interrogated on the point, says explicitly that it was applied by the applicant to "experiments in developing his improvements and new applications, and branches of the India rubber manufacture;" and this statement is uncontradicted. The fact averred and not denied, that De Forest has not been reimbursed these advances, which constitute a subsisting debt on the part of the applicant, furnishes no argument against their being charged to the patent. All moneys expended upon the invention and its introduction into use are properly so chargeable, no matter whence cr how obtained. Restoring, then, these items, and adopting the other corrections of the examiner, there will still remain to the credit of the invention a clear profit of \$54.733 63 The applicant, in his amended statement, acting under the promptings of the same high sense of honor which led him to satisfy an indebtedness of \$35,000 from which he had been discharged by a certificate of bankruptcy, shrinks from debiting the patent with any expenditures the particulars of which he cannot recall with some degree of certainty, but, while doing so, unhesitatingly expresses the belief that they were quite as large as the sums set forth in gross in the first account. It is probable—indeed, in view of the whole testimony, it is my firm conviction—that if it were possible to extract from the tangled mazes of the multifarious and now half-forgotten transactions connected with the invention all the moneys expended therein, it would be found that, instead of there being a balance to its credit, the balance would be on the other side. am justified in arriving at this conclusion from the fact, that, although the applicant has had no other occupation or business, yet, instead of having now in hand this sum of \$54,733 63, he is admitted to be penniless and overwhelmed with debt-and this, too, notwithstanding his life is shown to have been temperate, frugal, and in all respects self-denying. Being reimbursed his actual "expenses," is this sum of \$54,733 63 a reasonable remuneration to the applicant for the "INGENUITY and TIME" bestowed on the invention and the introduction thereof into use?

An earnest endeavor has been made to depreciate the ingenuity displayed in the invention, by representing the discovery to have been the result rather of "accident" than of scientific investigation. As early as 1834—'5, Mr. Goodyear seems to have formed a most exalted estimate of the capabilities, as a material for manufacture, of the gum known as caoutchouc, or India rubber. This gum had been previously extensively em

ployed in the fabrication of a variety of articles; but, owing to their indifferent quality, all concerned in these enterprises, as well as in those which followed for a series of years afterward, were involved in bank-ruptcy and ruin. The fabrics thus made could not keep the market, because they were found to grow rigid under the influence of cold, and to soften and become sticky under that of heat, while they rapidly decomposed when brought into contact with perspiration and the animal oils. The applicant was thoroughly convinced that these qualities, which had proved so disastrous to to the trade, could be removed, and he set himself resolutely to work to ascertain the process for accomplishing this result. Sulphur had already been advantageously combined with India rubber by Hayward, so that the discovery had been approached to its very verge. The step, however, which remained to be taken, short as it was, was indispensable, and without it all those which had preceded it would have been unavailing. Science could afford but little assistance in the inquiry; for, as the event proved, the most potent element in the process was too subtle to be disclosed by the severest chemical analysis. The applicant had therefore to pursue the investigation gropingly; but he persisted in it with an ardor and a courage which nothing could abate or daunt. His aim was definite, his conviction as to its attainability complete. As one who searches for a hidden treasure in a field where he knows it is to be found, so pursued he his explorations in quest of this secret. He sought it on the right hand and on the left, by day and by night, in the midst of ceaseless toil and lavish expenditure, and by the light of every form of experiment which his most fertile genius and daring spirit could suggest. He became completely master of everything known in regard to the properties of the material which it was his ambition to improve; and so thoroughly was he imbued with the soul of his inquiry, and so intensely quickened was his vigilance, that no phenomenon, however minute, could meet his eye, no sound, however faint, could fall upon his ear, without his at once detecting and appreciating its bearing upon the great problem whose solution he was seeking. From four to five years were passed in these unremitted labors, when an incident occurred which at once revealed the long-sought truth. And it is a singular coincidence, that the spark of light yielded by this incident was elicited by a collision, so to speak, the result of that intense zeal which, so far as health and fortune were concerned, had been the consuming fire of his life. In one of those animated conversations so habitual to him in reference to his experiments, a piece of India rubber combined with sulphur, which

he held in his hand as the text of all his discourses, was by a violent gesture thrown into a burning stove near which he was standing. When taken out, after having been subjected to a high degree of heat, he saw-what, it may be safely affirmed, would have escaped the notice of all others—that a complete transformation had taken place, and that an entirely new product—since so felicitously termed "clastic metal"—was the consequence. When subjected to further tests, the thrilling conviction burst upon him that success had at length crowned his efforts, and that the mystery he had so long wooed now stood unveiled before him. His history in this respect is altogether parallel with that of the greatest inventors and discoverers who have preceded him. The lamp had swung for centuries in the Cathedral of Pisa, but, of the thronging multitudes who worshipped there, none had heeded the lessons which it taught. It was reserved for the profound and observant intellect of young Galileo to extract from its oscillations the true laws of the pendulum, which led to the creation of an infallible measure of time. The theory of universal gravitation loses nothing of its grandeur or value because suggested by the falling of an apple from the tree. In all lands, by teeming millions, this phenemenon had been observed; but to none had it imparted instruction-to none had it spoken of that wonderful secret which lurked beneath its simple features. At length its "still small voice" fell upon the delicate and appreciative ear of one whom it startled into inquiry. The light thus afforded, to which all had been blind, was indeed dim and twinkling; but, following its guidance as one who traces back the dawn, the great Newton soon plunged into the full-orbed splendors of a discovery confessedly the most brilliant which has gilded and ennobled the annals of science. On all the hearth-stones of the civilized world, for thousands of years, the kettle had boiled and lifted its lid by the expansive power of its steam; yet for none had this seemingly trite and ever-recurring incident been significant—to none had it announced that measureless power of which it was the humble but distinct exponent. At length the movement caught the eye of a lonely student of nature, then a prisoner in the Tower of London; and in the soil of his prolific mind it proved the rapidly expanding germ of that steam engine whose triumphs have changed the social, political, and commercial aspects of the globe. So India rubber, in combination with sulphur, may by accident have been exposed to a high degree of heat often before without attracting the attention of any; and it is safe to allege that it might have been thus exposed a thousand times afterwards without the world's having been the wiser or wealthier for it.

thorough self-culture and training of the applicant and his unwearied researches, prepared him at once to seize upon, to comprehend, and embody in a practical form, the truth he sought, the moment it presented itself, no matter how dimly, to him. This was his merit---the same in kind with that of the most illustrious inventors who have appeared in the world, and by that of but few of them surpassed in degree. It is a figure of speech---but an exalted mode of expression—which assigns to man any part in the work of creation. In his very best estate he is but a ministering priest at her altar: and when he has reached the highest walk in the drama of intellectual power to which his feeble steps can ascend, he is still but an humble translator of the languages of nature. It is a fact which singularly increases the credit due to this inventor, that the very path in which he finally achieved success was the one which the experience of the past had taught him to shun. A low degree of heat had been been applied to a combination of India rubber and sulphur, and it had melted under it; so that heat—hte increased intensity of which consummated the discovery-was the very element which he had felt himself admonished to avoid. The discovery being made, the applicant soon thereafter added white lead to the combination, which rendered it complete; and, assuming that his mission was but begun, he bravely bent himself to the task of surmounting the obstacles which still frowned upon him on every side. These obstacles, so graphically sketched in the testimony, seem to have been almost unprecedented. Capitalists shrunk away from the discovery, so confidently announced, as a chimera; and manufacturers, who had suffered so deeply by the India rubber business, denied it their confidence. practicability had to be demonstrated by a long series of illustrations, which the total want of experience rendered protracted and often ruinously expensive. Every inch occupied in the enlarging field of its usefulness had to be conquered by many sacrifices, while of the Protean-formed applications to which it was destined to attain, there was not one that did not involve an outlay of treasure, of toil, and high artistic skill. All these, from the beginning to the present hour, have been bestowed-unceasingly bestowed-upon it; and as the fruits of all these have been, and are still being, reaped by the public, the applicant is entitled to remuneration for them.

Has the applicant been remunerated for the TIME which he has devoted to this invention and to its introduction into use?

It is extremely difficult to estimate in the coin of dollars and cents the worth of eighteen years of the prime of human life—especially so, when that life is one of lofty genius, of indomitable enterprise, and of stainless

virtues. It is, however, about that period of precisely such a life, that has been consecrated to the pursuit and development of this discovery; nor would a shorter period of time have sufficed for the arduous and perplexing This declaration may be made with the more emphasis, because, in all the volumes of testimony filed, there is not one word found tending to its contradiction. Throughout those long and toilsome years, it is apparent that there has been no compromise with the suggestions of avarice or with the claims to self-indulgence and ease. It has been already fully shown that the applicant's fortune, his health, the comforts of his family, the freshness of his early and the patient energies of his later manhood, have all been unhesitatingly melted down in the crucible of his inquiry; and he is now seen tottering towards that grave which must soon open in his path, with nothing left of the heroic and athletic man but what remains of the maimed and scarred soldier on the battle field—a wreck which every great and generous people have taken fondly to their bosom. The time of the indolent, the selfish, the dissolute, and the dull, is little worth to a world which they rather cumber than bless by their presence; but the time of the gifted, the brave, the philanthropic, and unconquerable sons of genius, has for mankind a value which we should but feebly express in the arithmetic of dollars. But while we may have no means by which to measure with unerring accuracy the intrinsic worth of the ingenuity and time which have been expended, and cannot by any analysis weigh or compute their ingredients, there remains to us one standard by which a proximate estimate at least may be reached—that is, the results which have been produced. What that time and ingenuity have yielded to the public is the true test of their value, alike to that public and to the inventor; for what the former have received the latter must, upon every principle of sound logic, be held to have parted with. What, then, have been the results of the discovery and introduction into use of the vulcanizing process? testimony is very full upon this point. learn that through this instrumentality a large foreign commerce has been created in the raw material, and an inland trade in the India-rubber fabrics amounting to between four and five millions of dollars annually; that extensive India-rubber manufactories have grown up, giving profitable investment to some seven millions of dollars of capital, and active employment to some ten thousand operatives; and that a large portion of these fabrics are intimately connected with human comfort and the preservation of human life. Not to enumerate more of the articles produced by this process, it would be hazarding nothing to say that the shoes and wearing

apparel perfected by it, and now cheaply and abundantly made, and almost universally in use, have saved thousands from a premature death, and may save millions in the ages which are to come. In the presence of these vast and still expanding achievements of this invention, the criticisms which have been made upon the applicant's accounts, as though they were some petty grocer's bill, shrink into insignificance, and, indeed, can scarcely be listened to without a blush. We have, however, a yet more definite basis on which to rest our judgment-the testimony of Hayward and Haskins. Both have long been India-rubber manufacturers under the vulcanizing process, and the former made the valuable discovery of combining sulphur with the gum, for which a patent was granted to him. Their depositions are marked by frankness, and leave no doubt of their perfect acquaintance with this great interest in all its ramifications and aspects. Hayward says that the vulcanizing process for the next seven years would be worth to the public one million of dollars; if so, it should have been worth two millions for the last fourteen years. Haskins does not hesitate to estimate the process at "many millions of dollars." It should be observed that the evidence of the contestants does not reduce these estimates. It is not possible to escape from the conclusion to which statements so emphatic, and coming from sources so fully entitled to credit, lead us. If, then, this process is worth two millions of dollars, the applicant has received but a little more than one-fortieth part of the remuneration which he was entitled to claim.

It has been assumed, as a means of avoiding the force of these estimates, that the applicant is entitled to receive from the public, not what the invention is now worth, developed and established as it is, but what it was worth when the patent issued. This view has been urged with much persistence and plausibility; but it has not impressed me as liberal or sound When the invention came timid and struggling into existence, meeting in every quarter with scoffs and distrust, had it been offered for sale in the market, it would probably have commanded a few thousand dollars—possibly less. But to say that its value is to be measured by what it was then considered to be worth would be to determine that the character of the tree is to be judged rather by the green than by the ripe fruit found upon its branches. present expanded and prosperous condition of the invention is mainly owing to the genius and unceasing struggles of the applicant, and he may justly reap what he has sown and so diligently cultivated. In the adjustment of machinery to accomplish the ends so distinctly pointed out by the inventor and in the manipulations of the gum and

treatment of the fabrics in the various stages of their manufacture, it is admitted that many improvements have been made by skilful mechanics and operatives, and these have their utility and importance; but to allow such labors to rival or depreciate the claims of the applicant, would be to rank the simple ploughman of the fields with that sublime and beneficent Providence which creates alike the soil out of which the harvest springs and the sunshine and the shower by which it is nurtured and matured.

Another and most potent reason why this patent should be extended is found in the acknowledged fact that the public have not kept the faith which they plighted with the applicant when he covenanted to surrender to them a product which was, in effect, the concentrated essence of the physical and intellectual energies of his entire life. public stipulated with him that he should peacefully enjoy for fourteen years the monopoly created by his patent, and, had he been permitted to do so, he would no doubt long since have realized an ample remuneration; but, so far from this having been the case, no inventor probably has ever been so harrassed, so trampled upon, so plundered by that sordid and licentious class of infringers known in the parlance of the world, with no exaggeration of phrase, as "pirates." The spoliations of their incessant guerilla warfare upon his defenceless rights have unquestionably amounted to millions. In the very front rank of this predatory band stands one who sustains in this case the double and most convenient character of contestant and witness; and it is but a subdued expression of my estimate of the deposition he has lodged to say that this Parthian shaft—the last that he could hurl at an invention which he has so long and so remorselessly pursued—is a fitting finale to that career which the public justice of the country has so signally rebuked.

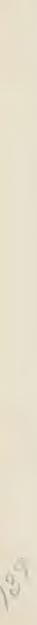
Important as are to the parties to this issue the immediate consequences bound up with it, they are insignificant indeed as compared with the value to the public of the principle involved. From the very foundation of this government, it has been its settled policy to secure a just reward to all inventors; and it is to the inflexible main-tenance of this policy that we are indebted for the unparalleled advancement which, as a people, we have made in the useful arts. All that is glorious in our past or hopeful in our future is indissolubly linked with that cause of human progress of which inventors are the preux chevaliers. It is' no poetic translation of the abiding sentiment of the country to say, that they are the true

jewels of the nation to which they belong. and that a solicitude for the protection of their rights and interests should find a place in every throb of the national heart. Sadly helpless as a class, and offering in the glittering creations of their own genius the strongest temptations to unscrupulous cupidity, they, of all men, have most need of the shelter of the public law, while, in view of their philanthropic labors, they are, of all men, most entitled to claim it. The schemes of the politician and of the statesman may subserve the purposes of the hour, and the teachings of the moralist may remain with the generation to which they are addressed; but all these must pass away, while the fruits of the inventor's genius will endure as imperishable memorials, and, surviving the wreck of creeds and systems, alike of politics. religion, and philosophy, will diffuse their blessings to all lands and throughout all

However much the seeming perplexity in the applicant's accounts may expose him to cavil and to that vituperation which is so ready a coinage of professional zeal, and however short some of the points in the case may fall of that complete elucidation which could have been desired, there is one fact established beyond all controversy, and which stands out from this record with painful prominence. . At the close of all his toils and sacrifices, and of the humiliations he has been called on to endure, this public spirited inventor, whose life has been worn away in advancing the best interests of mankind, is found to be still poor, oppressed with debt, and with the winter of age creeping upon his shattered constitution. It is perfeetly manifest that this is in no degree the result of vice or of improvidence on his part, but it is an inexorable consequence of the impoverishing experiments inseparable from the prosecution of his great enterprise, and of that prolonged and exhausting strife in which unscrupulous men have involved him. He now begs of that country to which the energies of his manhood have been so freely and so faithfully given, that he may be allowed to enjoy for a few years longer that precarious protection which our most feeble and imperfect laws extend to the fruits of intellectual labor; and were the appeal denied, I feel that I should be false to the generous spirit of the patent laws, and forgetful of the exalted ends which it must ever be the crowning glory of those laws to accomplish.

The patent will therefore be extended for seven years from the 15th June, 1858.

J. HOLT, Commissioner.









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